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Pride in my past:

Influencing sustainable choices through behavioral recall

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ABSTRACT

Emotional appraisal research has demonstrated that recalling a past behavior and its associated emotions can influence future behavior. However, how such recalled emotions shape sustainable consumer choice has not been examined. This study examines the role of recalled pride and guilt in shaping sustainable purchase intentions, and the mediating role of anticipated pride and guilt. A conceptual model is proposed for motivating sustainable purchase intentions through the emotions associated with behavioral recall. The model is applied in two experiments with online consumers examining purchase intentions of low carbon cars. Recalling feelings of pride associated with a past sustainability-related behavior increases sustainable purchase intention, as opposed to a neutral recall. This effect occurs through the mediation of both anticipated pride at the prospect of a sustainable behavior choice, and anticipated guilt if the future choice is not sustainable. Similar hypotheses relating to recalled guilt at past unsustainable behavior were not supported. The study contributes to research on sustainable consumption, revealing an emotional route by which past behavior can influence future behavior. It also adds to emotional appraisal research by showing the role of specific self-conscious emotions in forming this route, as prior research has focused more broadly on emotional valence.

Keywords Self-conscious emotion, pride, guilt, appraisal theory, past behavior, sustainable marketing, consumer behavior

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INTRODUCTION

Research interest in social and environmentally sustainable behavior has been increasing in recent years. Awareness among the public is also increasing, with environmental sustainability in particular becoming an established social norm in much of Western society (Peloza et al., 2013), in part due to the more frequent reports in the media. As consumption choices are significant in determining sustainability outcomes such as limiting greenhouse gas emissions, an area of particular interest is that of sustainable consumer behavior and the challenge of encouraging pro-environmental consumption habits. The current research defines sustainable behavior as consumer actions in product or service purchase, usage and disposal that minimize harm to the natural environment and to society (adapted from definitions by Stern, 2000; Steg & Vlek, 2009; Park & Ha, 2012).

Sustainable consumption behavior is important in tackling environmental issues such as climate change and resource scarcity. Equally, social sustainability has come under increasing scrutiny as companies' impacts on employees throughout the supply chain have become increasingly visible, while companies are being held responsible for lifestyle impacts such as obesity. The marketing function which has valuable expertise in impacting consumption behavior is increasingly being turned to in the hope of influencing behavior choices towards more sustainable alternatives (Peattie and Peattie, 2009; Gordon et al., 2011). These choices include, but go beyond, the purchase of products that minimize harm to the environment and to society. The burgeoning interest in the circular economy (Ellen MacArthur Foundation, 2013) illustrates the potential for engaging consumers across the entire product life-cycle, including not just purchase but also use and disposal. Consumer interest in repairing their existing goods (Schrader and Thøgersen, 2011) and purchasing refurbished used goods (O'Connell, Hickey and Fitzpatrick, 2013) are just two examples of sustainable consumption going beyond the purchase moment.

Attempts to change consumer behavior have, however, had limited success

(Barbarossa & Pelsmacker, 2016), and a longstanding scholarly discussion has considered whether this is due to weaknesses in theory. The dominant theoretical approach to sustainable behavior change has been the Theory of Planned Behavior (Ajzen, 1991), which implies the need to change attitudes, control beliefs or rely on societal norms. Sustainability marketers accordingly have attempted to shape attitudes through information-based campaigns promoting pro-sustainable behavior (Darley et al., 2010). Yet, although most people state that they care about being sustainable, few demonstrate this decisively in their behavioral choices, suggesting the existence of an attitude-behavior gap (Papista & Krystallis, 2013). While the potential for social effects in encouraging sustainable behaviors is rightly being explored (Steg & Vlek, 2009), these are not always effective, as only a few "deep green" consumers hold social norms strongly enough to influence their behavior. Perceived behavioral control towards being able to solve an issue through consumption choices has shown to influence sustainable behavior choices (Kim & Choi, 2005; Akehurst et al., 2012; Kang et al., 2013), yet an individual's perception of control over their own behavior is not necessarily consistent across every behavioral context, nor is it easy for marketers to substantially influence it (Cleveland et al., 2012).

Alternative routes to explaining and influencing sustainable behavior outcomes therefore continue to be explored. Among the promising recent examples, one stream has examined the role of self-accountability (Peloza et al., 2013), based on self-discrepancy theory (Higgins, 1987); another has explored the application of social identity theory, studying whether the beneficiaries of socially sustainable behavior are regarded as part of an in-group or an out-group, and whether these perceptions can be modified (Champniss et al., 2015).

In this article, the authors build on two further streams of theoretical explanation: the role of past behavior (Ajzen, 2002; Bamberg et al., 2003), and that of emotions (Moons & De Pelsmacker, 2012). Marketing research has demonstrated that emotions play an

important role in consumers' decision-making (Kemp et al., 2012), and the ability of advertising to elicit emotional responses from consumers has been well researched (Huhmann & Brotherton, 1997; Kemp et al., 2012). Scholars have argued that such emotional responses are influential in predicting future emotional appraisals and thereby impacting on consumer choice (Tracy & Robins, 2006) as well as word-of-mouth (Nyer, 1997); this has been evidenced in consumption contexts from luxury goods (McFerren et al., 2014) to ethical purchases (Steenhaut & Van Kenhove, 2006). Particularly in such ethical and sustainability contexts, the study of emotions in marketing communications has been dominated by negative emotions such as guilt or fear appeals, and these appear to have some success in influencing behavior (Dickerson et al., 1992; Huhmann & Brotherton, 1997; Chen, 2016).

The most relevant negative emotion to sustainable consumption appears to be guilt, defined as a self-conscious emotion elicited when consumers reflect on their previous behavior and realize that their conduct does not live up to their personal goals, norms or standards (Tracy & Robins, 2007; Antonetti & Maklan, 2014b). In consumer research, guilt has primarily been examined in the form of anticipated guilt, experienced when contemplating the outcome of a behavior (such as a purchase or usage behavior) as not achieving a personal standard. Anticipated guilt has successfully motivated a number of sustainability-related behaviors through the desire to avoid feelings of guilt associated with not choosing a sustainable alternative (Steenhaut & Van Kenhove, 2006; Carrus et al., 2008; Elgaaied 2012; Peloza et al., 2013; Antonetti & Baines, 2015).

The question naturally arises whether positive emotions, too, may play a role in engendering sustainable behavior. In particular, recent research has proposed the role of anticipated pride and not just anticipated guilt in influencing sustainable purchase intentions (Onwezen et al., 2013, 2014). Pride is defined as a self-conscious emotion which emerges from exhibiting behavior that is in accordance with personal standards and valued goals,

and which is associated with a sense of attainment and self-worth (Tracy & Robins, 2007; Antonetti & Maklan, 2014b). As a result, feelings of pride can motivate consumers to want to carry on achieving their goals and gaining the feelings of pride associated with the behavior (Peter & Honea, 2012). The potential of anticipated pride for motivating sustainable consumption behavior is still little explored, however, and only recently has it been applied to sustainable consumption choices such as ethical purchase intentions (Harth et al., 2013; Antonetti & Maklan, 2014a, 2014b). These prior studies have laid some theoretical and empirical groundwork by demonstrating the impact of anticipated pride and guilt on behavior outcomes. For practitioners, this raises the crucial question of how anticipated pride and guilt can themselves be engendered. The promising study by Antonetti & Maklan (2014a) demonstrated that feelings of anticipated pride and guilt, elicited through a postconsumption scenario, successfully influenced future ethical purchase decisions. Building on this research, a theoretical possibility for influencing anticipated pride and guilt is to look at the role of emotional recall. Specifically, the role of the past in eliciting appraisals of *recalled* pride and guilt is explored, and how these can inform future consumption choices.

The impact of recalling a past emotion on future behavior outcomes has been successfully demonstrated in a variety of contexts, such as appraisals of stress related to an event (Levine et al., 2012), water conservation behaviors (Dickerson et al., 1992), and condom use (Arsonson et al., 1991). The recalled emotions in these studies are believed to influence behavior via their impact on *anticipated* emotions. Self-discrepancy theory (Higgins et al., 1987) and dissonance theory (Festinger, 1957) have demonstrated the role of recalled negative emotions on anticipated negative emotions for influencing outcomes such as task performance (Duval & Lalwani, 1999), affect (Higgins et al., 1986; Higgins, 1987; Tangney et al., 1996), and approach versus avoidance behaviors (Higgins et al., 1994). From a contemporary perspective, however, most of these recalled-emotion studies

have the limitation that they merely measure emotional valence (Baumeister et al., 2007) and not specific emotions. More recently, Tong (2015) assessed the role of recalled positive appraisals on a number of positive emotions, and Jordan et al. (2011) explored the impact of positive emotional outcomes in the context of moral behavior. Again, these studies have looked at positive emotional valence, and not specific positive emotions such as pride. While this previous work is promising, then, it is still not clear whether and how recalled pride and guilt can be elicited in order to guide future behavioral choices (Aaker et al., 2008). In particular, the role of emotional appraisals of pride and guilt, elicited from a past behavior, for influencing anticipated pride and guilt and hence future sustainable behavior has not been explored, to our knowledge.

This study addresses this gap. Through a first experiment, the authors examine how recall of a past sustainability-related event, chosen to elicit either recalled guilt or recalled pride, impacts on future sustainable purchase intentions, as compared with recall of a non-sustainability related event (a neutral recall). Through a second experiment, the role of anticipated pride and guilt in mediating between the recalled emotions and sustainable purchase intentions is explored (see conceptual model in Figure 1).

The current research thereby makes a number of contributions to literature. First, this study confirms recent work that has shown that pride and not just guilt can impact sustainable consumer choices (Harth et al., 2013; Onwezen et al., 2013, 2014; Antonetti & Maklan, 2014a, 2014b), adding that both can be manipulated and that, at least in some contexts, pride may prove a stronger route to behavior change than guilt. Second, the current research extends the broader emotional appraisal literature by examining the role of recalled pride as well as guilt for motivating behavior. Third, a contribution is made to both sustainable consumption and emotional appraisal literatures by evidencing how anticipated pride and guilt mediate the impact of recalled pride and guilt on sustainable purchase intention. These findings are relevant to practitioners wishing to influence

sustainable consumer behavior, by providing a way to manipulate anticipated pride and guilt that can be easily achieved in marketing communications.

<Insert Figure 1 about here>

CONCEPTUALIZATION

The Role of Appraisal Related Emotions in Behavior Intentions

According to appraisal theory, emotional responses are created as a result of one's evaluations of an event (Lazarus, 1991). Appraisal theory emphasizes that encouraging individuals to reflect on a past event and its associated emotions can act as a basis for an individual to make future decisions (Ajzen, 2002; Levine et al., 2001). Making people think about their past performance forces them to evaluate whether they successfully achieved a goal and its associated emotions. Individuals then use this evaluative state to make judgments that inform future behavior decisions (Levine et al., 2012; Hasford et al., 2015).

This theory has been applied to a number of contexts such as coping with stress (Lazarus & Folkman, 1984; Lazarus, 1991), emotional regulation (Kemp et al., 2012) and task performance (Duval & Lalwani, 1999, Belschak & Den Hartog, 2009). More recently, emotional appraisals have been identified as a promising area for explaining consumption behavior (Nyer, 1997; Bagozzi et al., 1999; Johnson & Stewart, 2005). These studies, however, have mainly been focused around negative appraisals, and results from the limited body of positive appraisal research have been inconsistent. For example, Winterich & Haws (2011) suggest that positive emotions are only effective when adapting a future temporal focus rather than when appraising the past; Jordan et al. (2011) found that recalling a moral behavior does not influence prosocial intentions, whereas recalling an

immoral behavior does; and Louro et al. (2005) found that the positive emotion of pride can result in decreased repeat purchase intentions. This contrasts with other work reporting that a positive valence recall can have a positive behavioral effect (Tong, 2015). This leaves uncertainty around what influence positive appraisals can have on consumer behavior. A second gap which may be related to the first is that the majority of appraisal literature has focused on emotional valence in general (whether the emotional response is positive or negative), and what appraisals cause this positivity of emotion, leaving unclear the role of more specific emotions for influencing behavior outcomes (Watson & Spence, 2007).

The Complementary Role of Pride and Guilt Appraisals

In looking to understand this role of more specific emotions, a promising area to look is the role of self-conscious emotions. Consistent with the emotional appraisal perspective, self-conscious emotions influence behavior through the attribution of responsibility to one's self (Tracy & Robins, 2004; 2007). This attribution of responsibility is especially effective for encouraging individuals to re-evaluate the outcome of their behavior and to motivate action (Levine et al., 2001; Peter & Honea, 2012). Assigning responsibility to the self can reduce individuals' ability to pass blame to others or apply neutralization techniques to rationalize their behavior (Tracy & Robbins, 2004; Antonetti & Maklan, 2014a).

Much of the literature on recalled self-conscious emotions for regulating behavior has focused on negative affect. Negative self-conscious emotions such as guilt are elicited when an individual attributes failure to an "internal, unstable, and controllable cause, such as effort" (Tracy & Robins, 2006, p1348). A multitude of research has demonstrated the ability of guilt to guide a variety of decisions (Tangney et al., 1996; 1998; Dahl & Honea, 2005; Basil et al., 2006; Hibbert et al., 2007; Carni et al., 2013). Furthermore, Allard &

White (2015) show that guilt can be channeled from a focus on previous wrongdoings to influence future preferences of products with self-improvement benefits. Overall, it is well established that negative emotions, and guilt in particular, can act as mechanisms for action to avoid or control for future occurrences of negative affect (Peter & Honea, 2012).

The study of self-conscious emotions increased in the psychology and marketing fields in the 1990s (Gaur et al., 2014), yet positive emotions such as pride only gained comparable interest more recently (Tracy et al., 2014). Pride, like guilt, is a self-conscious emotion that results from cognitive appraisals of one's self in the occurrence of an emotion-eliciting event (Tracy & Robins, 2004; 2007). It is a positive emotion elicited when an individual evaluates an event as relevant to the self for achieving their goals (Louro et al., 2005; Tracy & Robins, 2007; Tracy et al., 2014). As a result, feelings of pride motivate individual behavior to carry on achieving their goals and gaining the associated feelings of pride (Peter & Honea, 2012).

Previous research has shown that positive emotions associated with past behavior stimulate subsequent behavioral intentions (Bagozzi et al. 1999; Louro et al., 2005) by reinforcing an individual's belief in their ability to attain positive outcomes through their actions (Louro et al., 2005). Appraisals of pride in marketing have been applied to contexts such as service satisfaction (Lastner et al., 2016), snack consumption (Winterich & Haws, 2011) and wasteful consumption behavior (Peter and Honea, 2012), yet the role of pride is still relatively under-explored. More recently, in a sustainability context, Schaffner et al. (2015) successfully used communications about biodiversity to evoke positive and negative emotions; however, their study did not look at past consumption behavior or recalled pride and guilt specifically. Previous studies do show that pride can be manipulated (Levine et al., 2001; Salerno et al., 2015). For example, Salerno et al. (2015) manipulated pride in the context of the amount of restraint a consumer exhibits in their self-regulatory behavior. These examples have not, however, explored the influence of

pride in a purchase behavior context, or for influencing sustainability related behavior. Pride research in sustainability marketing literature has seen a promising increase in recent years, yet this has looked at the role of anticipated pride, and not yet that of recalled pride.

The current research, therefore, explores the role of recalled pride and guilt on sustainable purchase intentions. Summarizing the above discussion, an emotional appraisal of pride at one's action is expected to motivate similar action in future, in order to again achieve one's goals and regain the positive feeling of pride (Peter & Honea, 2012). This role of self-conscious emotions has been shown to apply to other forms of sustainable behavior (Hibbert et al. 2007). Furthermore, recalling a past event can trigger the associated self-conscious emotions (Levine et al., 2012) and hence have an impact on future behaviors, just as the original event did (Aronson et al., 1991). Hence we hypothesize:

H1: Recalled pride leads to higher sustainability-related purchase intentions as compared to a neutral recall.

Guilt is expected to act similarly. A guilt appraisal can influence future behavior as the individual wishes to avoid a similar future negative effect (Peter & Honea, 2012). In particular, guilt can thereby engender sustainability-related purchase intentions (Antonetti & Maklan, 2014a). Furthermore, negative appraisals of past behavior, and not just negative anticipated emotions about future behavior, can influence behavioral intentions (Jordan et al., 2011) (as we expand on in the next section). Hence:

H2: Recalled guilt leads to higher sustainability-related purchase intentions as compared to a neutral recall.

The mediating role of anticipated emotions

After the emotional appraisal stage, behavior will be informed by the assessment of whether the anticipated outcome of a subsequent behavior will elicit positive or negative

emotions (Watson & Spence, 2007). The mediating role of anticipated emotions for regulating behavior has mainly been explored in terms of avoiding undesirable outcomes (Huhmann & Brotherton, 1997). For example, guilt appeals are thought to work through future anticipated emotions, and these are believed to be more effective than currently felt emotions for enlisting behavior change (Richard et al., 1996). Examples of this can be seen in the self-discrepancy theory literature (Higgins, 1987; Peloza et al., 2013) and the dissonance theory literature (Festinger, 1957), where behavioral decisions are mediated by anticipated negative affect. The role of anticipated guilt has successfully motivated sustainability-related behaviors through the desire to avoid feelings of guilt associated with not choosing a sustainable alternative (Steenhaut & Van Kenhove, 2006; Chang & Pham, 2013; Peloza et al., 2013; Antonetti & Baines, 2015). Nevertheless, anticipated guilt is relatively under-explored in comparison to other negative emotions such as explicit guilt appeals (O'Keefe, 2002) and fear appeals (Chen, 2016). Furthermore, the role of anticipated guilt for motivating sustainability behaviors is still not fully understood (Chang & Pham, 2013).

The potential of anticipated pride for motivating sustainable consumption behaviors is still relatively unknown. Only recently has it been applied to explaining consumption choices such as purchases of luxury brands (McFerran et al., 2014) and ethical purchase intentions (Harth et al., 2013). Recent research has shown promise for the inclusion of both anticipated pride and guilt for influencing ethical purchase intentions (Onwezen et al., 2013, 2014; Antonetti & Maklan, 2014a, 2014b). These studies show that positive self-conscious emotions such as anticipated pride, and not just guilt, can motivate purchase intentions.

The role of past behavior appraisals in eliciting emotions and their influence on consumption behaviors via anticipated emotions has not been explored in a sustainability context. As proposed by Baumeister et al. (2007), past emotional outcomes guide future

behaviors indirectly through anticipated emotional outcomes (Arsonson et al., 1991; Duval & Lalwani, 1999; Levine et al., 2012). Therefore, the following is hypothesized:

H3: The impact of recalled guilt on sustainable purchase intentions is mediated by anticipated guilt.

H4: The impact of recalled pride on sustainable purchase intentions is mediated by anticipated pride.

However, anticipated guilt might also play a role when consumers recall the pride associated with a past sustainable behavior: being proud about past sustainable behavior might elicit anticipated guilt in consumers sensing they may not raise to their previous self-standard (Antonetti & Maklan, 2014a). Therefore, the authors also posit that:

H5: The impact of recalled pride on sustainable purchase intentions is also mediated by anticipated guilt.

Similarly, anticipated pride might also play a role when consumers recall the guilt associated with a past sustainable behavior: feeling guilt about past sustainable behavior might elicit anticipated pride in consumers feeling they will raise beyond their previous self-standard. Thus, the authors hypothesize:

Hypothesis 6: The impact of recalled guilt is also mediated through anticipated pride.

STUDY 1

Study 1 investigates the direct effect of recalled pride and guilt on sustainable purchase intentions (Hypotheses 1 and 2). It is predicted that when recalled guilt is activated (compared to a situation of neutral recall), participants would have higher purchase

intentions of a low carbon car, in order to reduce feelings of guilt. Similarly, when recalled pride is activated (compared to a situation of neutral recall), it is anticipated that participants would have higher purchase intentions of a low carbon car to maintain feelings of pride.

Method

Recalled pride was induced by asking participants to recall a positive sustainability-related event, and recalled guilt was induced through recalling a negative sustainability-related event. The procedure followed established approaches of manipulating emotions, by asking people to recall a past event and contemplate how they felt about it (Aronson et al., 1991; Levine et al., 2012; Salerno et al., 2015; Wang et al., 2018), in order to form judgments that will guide future emotions and behavior. Specifically, participants received the instruction to "Think of a recent time in which you engaged in a behavior that was consistent with positive environmental values. That is, think of a time that you have engaged in a behavior that was good for the environment" (recalled pride condition) and respectively to "Think of a recent time in which you engaged in a behavior that was not consistent with positive environmental values. That is, think of a time that you have engaged in a behavior that was not good for the environment" (recalled guilt condition). This manipulation draws on the definitions of pride and guilt given earlier: the recalled pride condition asks the respondent to recollect a behavior that is in 'accordance with personal standards and valued goals, and which is associated with a sense of attainment and self-worth', to quote our definition of pride; similarly, the recalled guilt condition asks the respondent to recollect a behavior that 'does not live up to their personal goals, norms or standards', to quote our definition of guilt. This technique follows closely that of Salerno et al. (2015), who elicit recalled pride in a similar manner (while varying related cognitions

which fall outside our scope).

This manipulation was pretested, with measures of recalled pride ("Thinking about this occasion, how intensely did you feel pleased?", "Thinking about this occasion, how intensely did you feel good about yourself?", "Thinking about this occasion, how intensely did you feel pride?"; Roseman, 1996 and Levine et al., 2012; α=.90) and recalled guilt ("Thinking about this occasion, how intensely did you feel guilt?", "Thinking about this occasion, how intensively did you feel bad about yourself?", "Thinking about this occasion, how intensely did you feel remorse?"; Soscia, 2007 and Levine et al., 2012; α=.95) on a 7-point scale (1=Not at all, 7=Extremely). A total of 211 US-based Mechanical Turk (MTurk) users took part in the pretest. Participants were randomly assigned to one of two conditions, recalled pride and recalled guilt, in a between-subjects design. The pretest revealed that recalling a positive event elicited higher pride than recalling a negative one (5.55 vs 2.43; $F(1, 209)=139$, $p<.01$), and that recalling a negative event elicited higher guilt than recalling a positive one (Mean 4.91 vs 1.27; $F(1, 209)=295$, $p<.01$).

In addition to the positive (recalled pride) and negative (recalled guilt) conditions, a neutral condition was included in the main study to compare each recalled emotion relative to a neutral recall condition. Participants in the neutral condition were asked to "Remember the last time you went to the movies". This behavior was chosen as a neutral event as it is not sustainability related and does not elicit strong feelings of pride or guilt. Participants were then asked to write about the occasion they recalled depending on the experimental condition, in order to strengthen the manipulation of the desired emotions (cf., Levine et al., 2012).

Purchase intention was assessed through a single-item measure, "Next time you buy a car, how likely is it to be a low-carbon one?", on a 7-point semantic differential scale (1=Not likely at all, 7=Extremely likely). The recalled pride and guilt measures were repeated from the pretest. A total of 152 postgraduate students at a UK business school

participated in the study. 52.6% were female; the mean age was 31. Participants were randomly assigned to one of the three conditions (recalled emotion: guilt, pride, neutral) in a between-subjects design.

Results and Discussion

Purchase Intention. An ANOVA analysis comparing the level of purchase intention between all three groups was not significant at 5% ($F(2,148)=2.64$, $p<.08$); see Figure 2. Yet, given that it was significant at the 0.1 level, and following Rosenthal & Rosnow (1985) and Page, Braver & MacKinnon (2003), the specific hypotheses were tested using a planned contrast approach (Page, Braver & MacKinnon, 2003; Rosenthal & Rosnow, 1985). This revealed that the effect on purchase intentions is significantly different at the 5% level between the recalled pride and the neutral conditions (5.72 vs. 5.02; $F(1,148)=5.24$, $p<.05$), but not between the recalled guilt and the neutral recall conditions (5.23 vs. 5.02, $F(1,148)=0.76$, $p>.1$).

<Insert Figure 2 about here>

Discussion. Study 1 provides evidence about the influence of recalled pride and guilt on sustainable purchase intentions. The recalled pride condition functioned well, whereas the role of recalled guilt was inconclusive, when compared to a neutral recall. Purchase intentions were significantly higher when particpants remembered a positive suitainability event (i.e., recalled pride) rather than a neutral one. However, recalling a negative sustainability event giving rise to recalled guilt (compared to recalling a neutral event) did not alter purchase intentions significantly: while the mean difference was in the expected direction, this difference was not significant. This study therefore provides support for Hypothesis 1; however, in contrast to the clearly evidenced role of *anticipated* guilt in other

studies (Steenhaut & Van Kenhove, 2006; Peloza et al., 2013), our results do not provide backing for the influence of *recalled* guilt on purchase intentions, when compared to a neutral condition. Hence, Study 1 fails to find support for Hypothesis 2.

STUDY 2

Study 1 results suggest that, compared to a neutral recall condition, the recalled pride condition leads to higher sustainable purchase intentions. Unexpectedly, given the positive findings in prior work on the role of anticipated guilt (Peloza et al., 2013; Antonetti & Maklan, 2014a) in shaping behavioral intentions, the recalled guilt condition did not lead to significantly higher purchase intentions compared to the neutral recall condition. Given these results, the authors wanted to check whether the effect that recalled emotions have on purchase intentions is due to the anticipated emotions they elicit (Baumeister et al., 2007). Even though the planned contrast between the recalled guilt and neutral recall conditions on purchase intention did not reach significance, the current research sought to find evidence as to whether recalled emotions impact purchase intentions through their effect on anticipated pride and guilt (i.e., as an indirect effect). This was achieved by means of mediation analyses based on bootstrapping (Zhao et al., 2010). The current research also wished to replicate Study 1 with a fresh sample to provide further evidence on the main hypothesized effects (Hypotheses 1 and 2). A third motivation was to endeavor to strengthen these main effects by increasing the salience of sustainability in this context of car purchase. Prior work has found that sustainability appeals are more successful when they concern a product category which consumers already regard as sustainability related (Kronrod et al., 2012). The design was therefore

modified to remind all participants of the importance of car travel in environmental sustainability, as described below. Study 2 otherwise followed the same procedure as Study 1 and additionally explored the mediating mechanisms of anticipated pride and guilt (Hypotheses 3, 4, 5 and 6).

Method

Recalled emotions were manipulated following the same procedure as Study 1. To strengthen the salience of environmental sustainability as an issue when considering car purchase (Kronrod et al., 2012), participants were then presented with information about the environmental impact of cars, as shown in the Appendix. Participants were then asked to rate the extent to which they would purchase a low carbon car (with 3 items, "The next time I buy a car I am likely to choose one as low carbon as possible", "The next time I buy a car I would be inclined to choose one as low carbon as possible", "The next time I buy a car I would be willing to choose one as low carbon as possible", α=.92) using a 7-point scales (1=Strongly disagree, 7=Strongly agree). They then rated their anticipated feelings of pride towards the outcome of purchasing a low carbon car, and anticipated guilt towards the outcome of not purchasing a low carbon car, using a three-item scale for anticipated pride ("If you were to purchase a low carbon car, how intensely would you feel pleased?", "If you were to purchase a low carbon car, how intensely would you feel good about yourself?", "If you were to purchase a low carbon car, how intensely would you feel pride?"; α=.89; Roseman, 1996) and a two-item scale for anticipated guilt ("If you were not to purchase a low carbon car, how intensely would you feel remorse?", "If you were not to purchase a low carbon car, how intensely would you feel guilt?", α=.88; Soscia, 2007), on a 7-point scale (1=Not at all, 7=Extremely). Next, participants rated how much the recalled event elicited feelings of pride and guilt using the scales

from Study 1.

A total of 328 US-based Mechanical Turk (MTurk) users took part in the study. Five responses were rejected as incomplete, leaving a sample of 323. 51.4% of the sample were female; the mean age was 36.8. As in Study 1, participants were randomly assigned to one of three conditions, recalled pride, recalled guilt and neutral recall, in a between-subjects design.

Results and Discussion

Purchase Intention. The ANOVA analysis, depicted in Figure 3, shows a significant difference between the three conditions in terms of purchase intentions ($F(2, 320)=5.95$, $p<.01$). In order to test the specific hypotheses 1 and 2, the planned contrast analysis revealed that purchase intentions are significantly different between the recalled pride and neutral conditions (5.69 vs. 5.00, $F(1,320)=11.9$, $p<.01$); however, the test of difference in purchase intention scores between the recalled guilt and neutral conditions failed to attain significance (5.36 vs. 5.00, $F(1,320)=3.14$, $p=.08$). These findings are therefore largely consistent with those in Study 1, with an improved level of significance for Hypothesis 1. This improved significance may result from the strengthening of the salience of environmental sustainability in the Study 2 design, from the larger sample, or both.

<Insert Figure 3 about here>

Mediation Analysis. The ANOVA analysis suggested that there was a significant difference between the three conditions in terms of anticipated pride ($F(2, 320)=5.87$, $p<.01$) and anticipated guilt ($F(2, 320)= 2.95$, $p<.05$).

A mediation analysis was conducted to test the prediction that anticipated pride mediates the relationship between recalled pride and behavior intentions (Hypothesis 3), and that anticipated guilt mediates the relationship between recalled guilt and behavior intentions (Hypothesis 4), as compared with a neutral recall. Following the approach by Salerno et al. (2015), a special analysis was run using a 3-level categorical independent variable (recalled emotions) with neutral recall as the baseline, in order to evaluate the indirect effects for each recalled emotion relative to the neutral recall condition (Hayes & Preacher, 2014).

These predictions were tested using PROCESS model 4 (Hayes, 2013) in a multiple mediation model. In this mediation analysis, a 95% confidence intervals used were conducted at 5000 bootstrap samples. As presented in Table 1, the mediation analysis yielded point estimates, standard errors and confidence intervals for each indirect effect.

<Insert Table 1 about here>

With respect to recalled pride, the path from recalled emotion to purchase intentions through anticipated pride was significant (95% CI, .16 to .55), as was the path through anticipated guilt (95% CI, .03 to .26). This confirms Hypotheses 3 and 5. In respect to recalled guilt, the path from recalled emotion to purchase intentions through anticipated guilt was not significant (95% CI, -.04 to .17), and neither was the path through anticipated pride (95% CI, -.05 to .37). Consequently, the results fail to find support for Hypotheses 4 and 6.

Discussion. Study 2 found that when pride was elicited as a consequence of recalling a past sustainability behavior, its experience led to subsequent feelings of anticipated pride and guilt that mediated the route from recalled emotion to purchase intentions. Similar

effects were not found when recalled guilt was elicited. Based on these results, mediation happens via anticipated pride and guilt only when comparing between the recalled pride and neutral recall conditions. These results support the claim that pride is necessary for regulating sustainable behavior through the anticipation of achieving future feelings of pride and avoiding future feelings of guilt. This study supports previous research that found both anticipated pride and guilt to influence sustainable consumption behavior (Antonetti & Maklan, 2014a, 2014b). This research does however not corroborate those previous studies which suggest that negative appraisals of past behavior are more influential than positive appraisals for influencing (susatainable) behavior intentions (Jordan et al. 2011). The lack of a significant finding in this respect does not necessarily contradict this earlier work; the absence of a significant effect of recalled guilt as compared to a neutral recall may be simply a matter of statistical power, given the many other variables influencing sustainable behavior (as reviewed earlier in this work). There may also be context-specific differences in purchasing low carbon cars as opposed to other sustainability-related behaviors. Overall, Study 2 has shed light into the important role that recalled pride can play in influencing sustainable behavior intentions, through the desire to reduce future negative feelings as well as to maintain positive feelings.

GENERAL DISCUSSION

Research has shown that both anticipated pride and guilt can influence ethical behavior (Antonetti & Maklan, 2014a, 2014b); however, how these emotions might themselves be influenced is unclear. This study investigated the potential for recalled pride and guilt to influence these anticipated emotions, and further behavioral intentions. Across the two

studies, it is shown that (1) recalled pride, resulting from recalling a past sustainable behavior, can increase sustainable purchase intentions compared to neutral recall; (2) recalled guilt, resulting from recalling a past unsustainable behavior, does not significantly increase sustainable purchase intentions compared to neutral recall; and (3) both anticipated pride and anticipated guilt mediate the impact of recalled pride on sustainable purchase intentions when recalled pride is elicited.

Theoretical Contributions

This study builds on recent work showing that pride, like guilt, is an important emotion for motivating sustainability-related attitudes and behaviors (Onwezen et al., 2013, 2014; Antonetti & Maklan, 2014a, 2014b). The current study goes further, challenging common assumptions that negative self-conscious emotions are key to motivating sustainable behavior: the results suggest that pride about past behavior has a stronger effect than guilt about past behavior in motivating sustainable consumption choices – in this context, at least. However, this pride in appraisal influences behavioral choice not just through anticipated pride but also through anticipated guilt, reinforcing that positive and negative self-conscious emotions should be researched in parallel and that practitioner sustainability-motivated interventions should treat both in parallel.

This study also contributes to the broader emotional appraisal literature. To the knowledge of the authors, there are no studies to date that have looked at the role of anticipated pride in mediating the effect of recalled pride on consumer related behaviors (Watson & Spence, 2007). The findings of the current research have highlighted the importance of including feelings of pride associated with a past behavior for understanding or indeed triggering anticipated pride and guilt towards future behavior intentions. More broadly, these findings suggest that future behavior researchai using

emotions to drive attitude and behavior change should consider a route via pride. Rather than making people feel guilty, it is possible to make people feel good about their past sustainability achievements to better encourage future emotions—positive and negative—and engender sustainable behavior choices.

Practitioner Implications

These findings provide a significant opportunity for marketing managers wishing to change behaviors towards being sustainable. Practitioners are looking for new ways to engender sustainable behaviors, but have overlooked the potential of reminding consumers about their past choices. This study has shown a way to manipulate feelings of recalled pride and guilt that can be easily achieved in marketing communications, by simply asking consumers to think of a past occasion whereby they did or did not behave in a sustainable manner. Online channels provide a variety of options for asking consumers to recall past incidents, such as in market research or co-creation settings. Face-to-face channels, or other human-mediated channels such as online chat, could also naturally discuss past behaviors as part of the process of understanding consumer needs.

This approach may prove useful for a number of sustainability behaviors that are targeted through marketing communications, for instance recycling behavior and energy-saving usage behavior, and not just purchase decisions. Over time, memories of positive emotional experiences related to an individual's past sustainable achievements may become more prominent in future decision-making, leading to individuals needing just small cues to motivate future purchase decisions (Aaker et al., 2008; Peter & Honea, 2012). More broadly, this research supports recent findings that practitioners should avoid assuming that explicit guilt and fear appeals are the only emotional option in sustainability marketing communications; instead, practitioners might consider using

positively framed messages, or indeed conducting field experiments to try out several options, along the lines of the current study.

Limitations and Future Research

A number of limitations are evident. First, Study 2 involved a self-report survey conducted through an online panel provider whereby participants were paid a small fee. This could have allowed social desirability bias. All precautions were taken to reduce this through the study design, such as collecting dependent variables first, and including quality control variables to reduce poor responses. Second, while respondents were asked about their actual intentions as individual consumers rather than about hypothetical situations, neither was representative of a national population so could have idiosyncratic properties. Third, while the manipulation of asking participants to recall past behaviors was in a natural market research environment which can be replicated by practitioners, whether this manipulation would be more or less successful in other contexts such as on a firm website is unclear. Fourth, the dependent variable of this study was purchase intention; future field replications to test for actual behavior change would be invaluable.

Research is also needed into contextual differences, which may be substantial. For example, cultural differences between countries may be relevant: recall that our data comes from the UK and the US. Also, feelings of pride and guilt might be higher for consumption contexts where the sustainability issue associated with a behavior is more salient to consumers. Thus, eliciting recalled pride and guilt might be more successful for high issue-salient contexts. Some consumers think about carbon, for example, when buying a car, but less when buying kitchen white goods; similarly they think about social sustainability more for coffee or tea purchases than for soft drink or alcohol purchases; so in the latter cases, the persuasiveness of sustainability-related marketing interventions

becomes lower (Kronrod et al., 2012). Indeed, the current research made use of this effect in the design for Study 2, providing information to participants on the environmental impact of transport in order to boost the salience of environmental sustainability. In support of this notion, research has found that issue proximity can influence the effectiveness of guilt appeals; for example, when issue proximity is high, guilt appeals can backfire and lead to a reduction in sustainable behavior intentions (Chang & Pham, 2013).

Further research might also examine how goal compatibility can be used to influence recalled pride. For example, increasing goal relevance and goal congruency related to the sustainable behavior could lead to higher experiences of positive emotions (Nyer, 1997). As the findings suggest that recalled pride can play a role in influencing sustainable purchase intentions, increasing goal relevance and goal compatibility could lead to heightened recalled pride and subsequent feelings of anticipated pride and guilt. Future research might experiment with ways in which sustainable behavior can be primed as a desirable goal and examine its effect on sustainable behavior decisions.

Overall, the conceptualization of recalled pride and guilt for motivating behaviors remains little explored in sustainability contexts, yet the results of this research highlight its potential. Further research is required to explore the role of pride in more detail and to explore the potential of manipulating recalled pride and guilt for different sustainability contexts, as well as in practice.

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Table 1: Multiple mediation of the effect of recalled pride and guilt on sustainable purchase intentions through anticipated pride and guilt

Influencing factor	Mediator	Point estimate (PE)	SE	95% CI	
				Lower	Upper
Positive recall	Anticipated pride	.33	.10	.16	.55
Negative recall	Anticipated pride	.15	.11	-.05	.37
Positive recall	Anticipated guilt	.12	.06	.03	.26
Negative recall	Anticipated guilt	.05	.05	-.04	.17

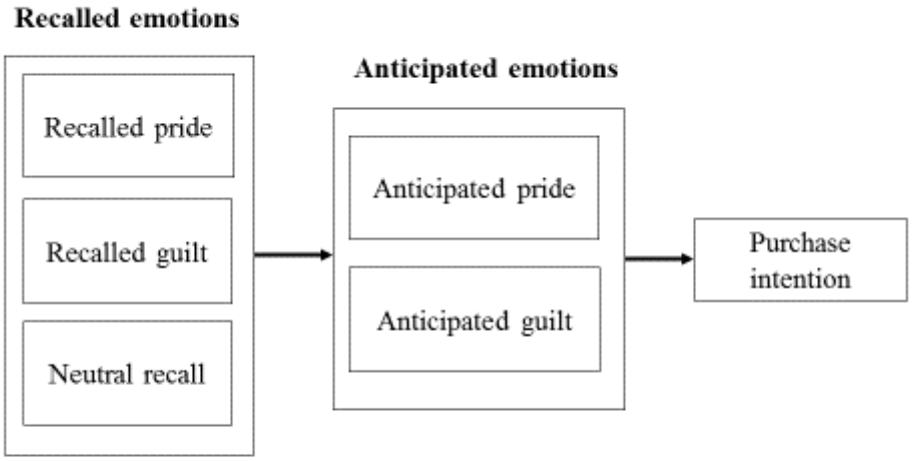

Figure 1: Conceptual model

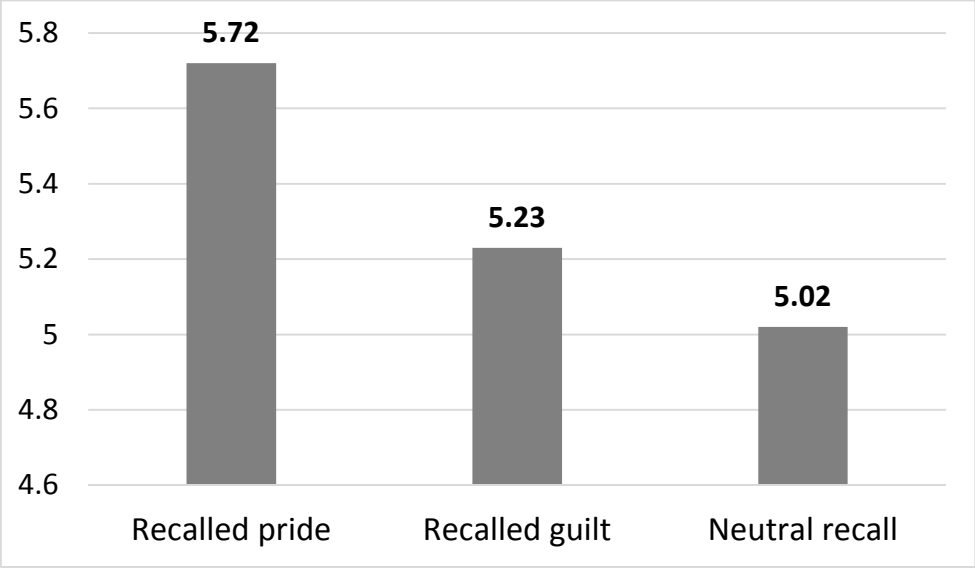

Figure 2: Study 1 – Sustainable purchase intention between recalled emotion conditions

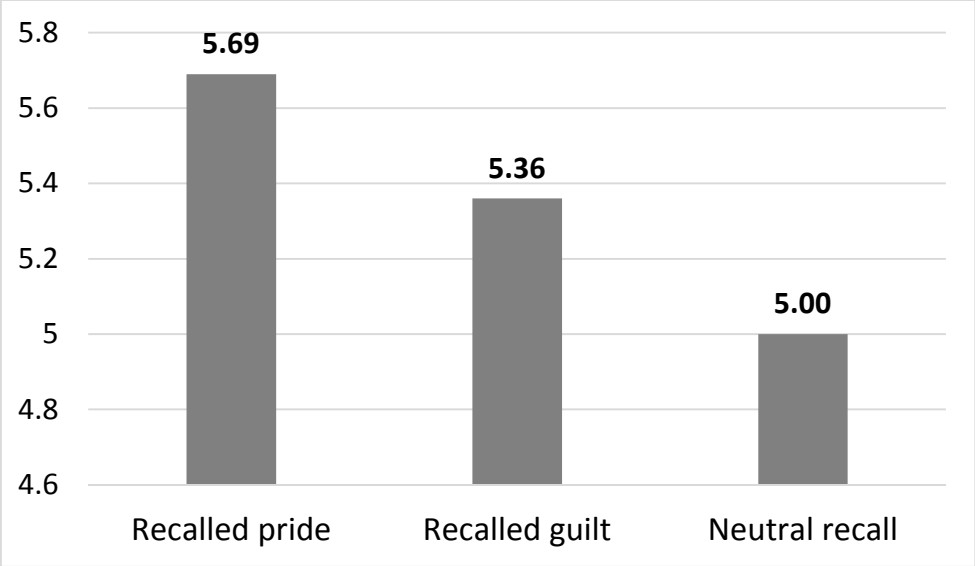

Figure 3: Study 2 - Sustainable purchase intention between recalled emotion conditions

APPENDIX

Material presented in Study 2 to boost the salience of environmental sustainability in car purchase choice

Motor vehicles are the second largest source of greenhouse emissions in the U.S.

"The combustion of fossil fuels such as gasoline and diesel to transport people and goods is the second largest source of CO_2 emissions, accounting for about 31% of total U.S. CO_2 emissions and 25% of total U.S. greenhouse gas emissions in 2014."
(United States Environmental Protection Agency)

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